HONORS STUDIO: Emergent Technologies (including AI) + Their Implications for Communities + Governance
-OR-
What the Tech?

Spring 2024
Last updated 2/13/24

Instructor: Kimberly D. Lucas
Email: k.lucas@northeastern.edu
Drop-In Hours: By appointment

Course Campus: Boston Campus
Course Room/Building: Ryder 394
Course Day/Time: R, 5:30-7:30pm ET
Course Dates: 2/8/24-4/4/24 (8 sessions)

Description: Technology has always shaped the way our societies work. From our ability to do work differently, to changing our range of mobility, to changing how we communicate with one another, technology has always shaped the way human groups interact, develop, and change–for better and for worse.

Similarly, societies have always found ways to ensure that their own cultural values and norms are preserved, and many societies have developed ways not just to govern themselves, but to evolve their governance to reflect not only changing values, norms, and ethics, but also the plurality of views and stances that influence the evolution of normative values and ideals.

So what happens when the parallel tracks of technology development and governance development intersect? In the past, societies and the multitudes they contain have sometimes placed restrictions on new technologies to ensure safety in the name of the public good. Other times, societies have placed no restrictions on new technologies to encourage innovation through competition. But how do societies grapple with emergent technologies? And, more importantly, how will *we* grapple with emergent technologies in our world today?

This Inside the Honors Studio course will expose students to emergent technologies and their implications for public administration and communities. In the first half of the course, we'll explore concepts of society, technology, governance, and the intersections across each of these. During the latter weeks, we'll deep dive into one particular emergent technology–AI–to understand the ways in which different types of societal actors consider this technology, ultimately contributing toward a set of recommendations for cities as they consider the uses and misuses of AI.

This course is designed for students from all backgrounds; no technical skills are required. Students should be excited to explore Boston beyond campus, including outdoor explorations and field trips/site visits during class time.

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Student Learning Outcomes: This course will examine, develop, and practice the various skills necessary for policy analysis. Upon course completion, course participants should be able to:

- Identify the values that shape communities' beliefs about technology and society
- Identify real and meaningful ways that technology can both help and harm different communities
- Apply rigorous analytic skills to a policy analysis framework to begin to address policy challenges
- Tell the story of their journey in understanding the benefits and the challenges to unleashing emergent technologies in society

Active course participation and course assignments will provide participants with the opportunity to exercise their observation, listening, trust- and relationship-building, teamwork, writing, storytelling, and analytic skills.

Expectations: Because this is an Honors-level course, students will be held to graduate-level standards—as will the instructor. Together, we will meet the following expectations:

A. Present *and active* participation. **This class is yours.** Students are expected to take ownership of this class by being on time, present, and prepared. Students are also expected to…
   a. come prepared by engaging with the preparation materials and assignments ahead of time,
   b. share their knowledge, experience, and expertise with others in a way that is comfortable to them, rather than save it solely for their personal use, and
   c. actively listen to and engage with their peers as they share their own knowledge, experience, and expertise.
B. Ask questions. There are plenty of things that we will cover in a short amount of time. I do not expect everyone to know about every technology or government acronym or anything about Boston's history. BUT I do expect students to do one of two things when they are unfamiliar with a concept:
   a. raise your hand and ask me (or your fellow student) to explain, or
   b. Google it.
C. Clear communication. The exchange of ideas and knowledge cannot occur without clear communication. Therefore, students are expected to:
   a. complete assignments on time and adhering to professional standards (see Assignments + Grading below) and

      b. provide the instructor with important information in a timely manner (life circumstances that affect the quality of assignments or the timeliness of assignments, etc.). **Extensions will only be granted to those with extenuating circumstances.** These must be communicated to the instructor as soon as possible.

I understand that there may be alternative priorities beyond students' academic work that may interfere with class engagement. I will do my best to be understanding, patient, and supportive if personal/life events arise, and I hope that students will extend the same flexibility to me. You do not need to apologize to me for any challenges you might face, but I do hope that you will communicate with me about how you plan to move forward in class. My assumption is that we are all working the best we can, under sometimes difficult circumstances.

Specifically, each week, students are expected to:
1. Review the week's focus.
2. Engage with all assigned preparation materials.
3. Participate in the class discussion and activities.
4. Complete and submit all assignments and project deliverables by the due date.

A Note on Course Content + Co-Creating a Culture of Respect: Unlike some areas of study, tech policy is an active and living field—because the people who are affected by it *and* the people who create and enact it are, in fact, active and living human beings. Because of this, the topic areas we will grapple with will, at some point, touch you personally; regardless of where we're from, how we live, or how we grew up, these policies have and continue to shape our lives. The second wave feminist saying, "The personal is political" is true in its inverse: the political is also personal.

We will talk about things that, for all at some point and for many reasons, will be difficult to talk about. In order to partake in these difficult discussions with the highest degree of freedom, I will look to all of us, as a collective, to create, maintain, and amend class norms that allow for *everyone* to feel included and invited to engage in respectful and honest discussions to the best of their ability. **The goal is to use the best evidence to understand and articulate what we are excited about—and scared of—when it comes to considering how emergent technologies can shape our lives.** We may not all agree on policy problems and solutions, but our disagreements should be based upon a review and critique of the evidence.

It is difficult to predict if and what content may be upsetting for each person. If you need to leave the room or pass on a discussion topic, I understand and hope that we give one another the grace needed not only to opt out, but also to opt in and be vulnerable in our ability to share our whole selves or make mistakes in front of one another.

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Feedback is Imperative: I am committed to making this course a valuable learning experience, meaning that I hope it is challenging and rewarding, stimulating and exciting, and something that is directly relevant to our everyday lives and the everyday lives of our friends and neighbors. We will dedicate time to evaluate our progress and make any necessary changes to keep us on track and optimize the course. I welcome your feedback regarding the class at any time. Please feel free to ask questions or raise concerns that you have, however large or small. Please contact me to set up an appointment if that would be beneficial.

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Assignments + Grading

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Grading Scheme: The following grading scheme is created in accordance with the NU Grading System for undergraduate students and will be used to assign grades at the end of the course:

95-100%	A	4.0	77-79%	C+	2.33	Incomplete	I
90-94%	A-	3.67	73-76%	C	2.0	In Progress	IP
87-89%	B+	3.33	70-72%	C-	1.67	Withdrawal	W
83-86%	B	3.0	0-69%	F	0.0	Audit	L
80-82%	B-	2.67				Not Enrolled	N

If you would like to discuss your grades in the course, please make an appointment to meet with the instructor. To comply with FERPA, grade discussions will not be held via email.

Assignments: For simplicity's sake, every course I teach comes with a set of assignments whose collective points total to 100. That means students can very clearly and in real-time calculate how well they're doing in the class with every grade. In addition, I don't give points for attendance or participation as these are simply expected.

Course grades will take into account 13 separate assignments, broken down in the following way:

Assignment	# Points	Due Date
Tech + Your Community Memo *Individual Assignment*	10	02.15.24 @ 5:30pm
Tech Governance Memo *Individual Assignment*	10	02.22.24 @ 5:30pm
AI + Everyday Life Memo *Individual Assignment*	10	02.29.24 @ 5:30pm
SPRING BREAK		03.07.24 @ 5:30pm

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AI + Society Issue: Background Memo *Group Assignment*	15	03.14.24 @ 5:30pm
AI + Society Issue: Potential, Concerns, + Critiques Memo *Group Assignment*	15	03.21.24 @ 5:30pm
AI + Society Issue: Recommendations Memo *Group Assignment*	15	03.28.24 @ 5:30pm
Video + Final Memo *Group Assignment*	25	04.04.24 @ 5:30pm
TOTAL	**100 points**	

All written assignments and their accompanying due dates will be posted in the "Assignments" section on Canvas unless noted, and completed assignments should be submitted to their respective spaces via Canvas. Changes to assignment due dates may occur to align with course materials. Updates to assignment due dates will be posted in advance on Canvas and announced in class. It is students' responsibility to check Canvas regularly for class updates and changes to assignments. I will try to provide feedback on assignments within a week of its due date.

Professional Standard: All written work will be held to a professional standard. Here is a little guidance, though, as in the real world, your choice of "professional" is ultimately your own:

- **12-point font** with **one-inch margins;**
- **Single-spaced** deliverables;
- For citations, **use footnotes or endnotes**. There is no preferred citation style (APA, ASA, Chicago), but please **be consistent in citation format**.

In case it's helpful: I've compiled some resources from other professors, past classes, and former students:

- **Want some policy writing tips?** Check these out.
- **Looking for data?** Try these starting points.

If you've got any to add, please let me know!

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Course Preparation Material

Course Preparation: All course preparation material will be provided in electronic form and can be downloaded via Canvas. Many of these can also be searched via the internet or the university's library, though some readings may need to be accessed via [InterLibrary Loan](). All preparation should be completed *prior* to the class meeting; if preparation materials are listed for 02.08.24, they should be engaged prior *to* 02.08.24.

The instructor reserves the right to make changes in or additions to the preparation materials and assignments in the syllabus. These changes will be posted in advance on Canvas and announced in class. It is students' responsibility to check Canvas regularly for class updates.

NOTE: We will not spend time in class discussing the specific preparation materials. Instead, I will expect that you engage with the materials prior to class and are able to reference them during class discussion. One way of testing your ability to do this is to see if you can "see" the material in your real, everyday lives.

Technology

In the event that we need to, we will use the following Zoom links, which can also be found in Canvas:

Join Zoom Meeting
https://northeastern.zoom.us/j/98815309547?pwd=WVJXaENFbzUvL0pBZ3NGbENwUjlMUT09

Meeting ID: 988 1530 9547
Passcode: 096222
Find your local number: https://northeastern.zoom.us/u/aE75CJYrL

Additional Course Policies

Academic Integrity + Code of Conduct: Please refer to the NU Academic Integrity Policy, which can be found at: [Office of Student Conduct and Conflict Resolution (OSCCR)](). You are expected to uphold standards of academic integrity.

Plagiarism is a form of cheating that involves presenting the words or work of others as if it were one's own, and is a violation of the academic integrity policy. While the social exchange of ideas is, in fact, encouraged in and beyond the classroom, the assignments turned in under your name must be original and produced independent of others. When using words or ideas of others (this

includes academic writers, anything found on the Internet, your classmates, your neighbors, etc.), you <u>must</u> acknowledge your source by using proper references (see Assignments + Grading above) and quotation marks to delineate any direct use of others' words or ideas. Instances of plagiarism will result in a grade of F for the assignment and will be reported to OSCCR. The Northeastern librarians have created a resource to help you avoid plagiarism, which can be accessed here: https://subjectguides.lib.neu.edu/plagiarism.

Please always consult with the instructor, a librarian, or members of the writing center if you have any questions about how to include or reference materials from other sources in any assignment. You are encouraged to speak with the instructor for clarification on this policy and/or if you have any questions about course assignment instructions.

<u>Use of AI:</u> Please be advised that while AI tools like ChatGPT and DALL-E can be invaluable for brainstorming and enhancing learning, they must be approached with critical discernment due to their potential imperfections, including producing imprecise or biased outputs.

Maintaining academic integrity is paramount: any content assisted or generated by AI must be properly attributed, and students should specify the role of the AI, the tool employed, and any input prompts at the end of assignments. Misrepresentation of AI-generated content as one's own or failure to accurately cite such contributions is a violation of our academic integrity policy and will be addressed accordingly.

For optimal results with AI tools, it is recommended that students engage with them on familiar topics and provide clear, precise prompts, leveraging the synergy between human knowledge and AI capabilities.

It's funny to write this in a syllabus for an AI course.

Accommodations: I am committed to providing equitable access to learning opportunities to students with documented disabilities (e.g., mental health, attentional, learning, chronic health, sensory, or physical). To ensure access to this class, and program, please contact The Disability Resource Center to engage in a confidential conversation about the process for requesting reasonable accommodations in the classroom. This Center works with students and faculty to provide students who qualify under the Americans With Disabilities Act with accommodations that allow them to participate fully in the activities at the university. Ordinarily, students receiving such accommodations will deliver teacher notification letters at the beginning of the semester. Accommodations are not provided retroactively, so students are encouraged to register with the Disability Resource Center (DRC) as soon as they begin their program. The University requires that you provide documentation of your disabilities to DRC so that it may identify what accommodations are required and arrange with the instructor to provide those on your behalf, as needed. Note that students have the right to choose whether to disclose their specific disabilities to instructors, but must provide a letter to receive accommodations.

If you are a student who needs accommodations and wish to have a reasonable accommodation made for you in this course, please contact the instructor and present your letter of accommodation as soon as possible. Letters of accommodation should be presented at the start of the semester to ensure timely and proper provision of accommodations. If you need assistance, you can contact the Disability Resource Center.

Title IX Protections and Resources: Title IX of the Education Amendments of 1972 protects individuals from sex or gender-based discrimination, including discrimination based on gender-identity, in educational programs and activities that receive federal funding. Any NU community member who has experienced such discrimination, sexual assault, relationship violence, stalking, coercion, and/or sexual harassment, is encouraged to seek help. A good starting place is the Office for University Equity and Compliance or the Office of the Graduate Ombudsperson. In addition, confidential support and guidance can be found through University Health and Counseling Services, the Northeastern Center for Spirituality, Dialogue, and Service, and the Office of Prevention and Education at Northeastern (OPEN).

Students should note that faculty members are considered "responsible employees" at Northeastern University, meaning they are required to report all allegations of sex or gender-based discrimination to the Title IX Coordinator. For additional information and assistance please see the Office of Diversity, Equity, and Inclusion.

If You Are Feeling Sick: Staying safe is a responsibility that we all must take seriously. Remember that our individual actions will help everyone stay safe. If you don't feel well, it's okay to stay home–just communicate as early as you can!

Academic Support Resources

Academic Support: If you are in need of additional academic advising, support, including peer tutoring, please contact the Office of Academic Advising. And/or you may always come to my office hours and/or make an appointment to come see me about course content, assignments, expectations, etc.

International Tutoring Center: The International Tutoring Center (ITC) provides current Northeastern University international students with free, comprehensive English language and academic support. The ITC includes English as a Second Language Tutoring (ESL), Language and Culture Workshops, and Reading Workshops.

Policy Writing Resources: Policy writing is a different and difficult writing style. Please make an appointment with the instructor, the writing center (below), or a librarian if you have any questions or issues about your writing. Many more resources are available in the "Policy Writing ProTips" page above.

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Snell Library: Snell Library offers a variety of resources for undergraduate research, including subject-specific Research Guides, help with citation and bibliography, and 24/7 chat support. The library also houses Research Data Services, which offers a variety of resources for instructors and students to use and visualize data in their projects.

Our librarian, Roxanne Palmatier, is also a wonderful resource: r.palmatier@northeastern.edu

The Writing Center: The Northeastern University Writing Center offers free and friendly tutoring for any level of writer, including help with conceptualizing writing projects, the writing process, and using sources effectively. The Writing Center has two campus locations (412 Holmes Hall and 136 Snell Library) as well as virtual appointment services. Advance and same-day appointments are available. To make an appointment, or learn more about the Writing Center, visit their website, or email WritingCenter@northeastern.edu.

<h2 style="background-color:red;text-align:center">Student Well-Being Resources</h2>

Mental Health Resources: Confidential Mental health resources available through Northeastern's University Health and Counseling Services and through Find@Northeastern, a 24/7 mental health consulting line that can be reached at 1-877-223-9477.

WeCare: WeCare offers supports for students during times of difficulty or challenge. You can find WeCare at 226 Curry Student Center. They are open Monday-Friday, 8:30am-5:00pm. You can also call at 617-373-7591 or email wecare@northeastern.edu.

Office of Prevention + Education (OPEN): The Office of Prevention + Education provides confidential support for those struggling with substance use. They also have a confidential sexual violence resource center.

<h2 style="background-color:red;text-align:center">Acknowledgements + Use</h2>

Course materials created by the instructor are created under a Creative Commons license and may be shared for non-commercial purposes, provided the proper attributions are made.

I want to acknowledge that this syllabus was developed in collaboration with Greg Zapata (Boston Area Research Initiative) and Marvin Venay (Tech Goes Home). Huge thanks for their wisdom and contribution to making this syllabus way better than when it was first drafted.

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And now, the actual syllabus...

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Weekly Topics, Preparation Material, + Assignments

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Part 1: Foundation (aka Who Am I, Who Are We, What Are We Doing Here)

Wherein we find footing with who we are and what we are doing here.

Week 1, 02.08: Overview: Tech + Society
What is this class about?
What is technology? What is society? What do these have to do with one another?
LOCATION: NU - Ryder 394

Prepare for this class by...
- Watching the City of Boston's "What the Tech?" playlist to (a) familiarize yourself with some of the tech that exists all around us and (b) familiarize yourself with the "What the Tech" format and style of communicating about technology with everyday residents in Boston. Some questions to consider:
  - Who is this for? Would your sibling or your parent understand it? How about a high school student? Someone who recently arrived in Boston? How about older adults?
  - What is "technology"? Who is the technology *actually* working for? Who decides what tech goes where? Who decides that we *need* these things all around the city?
  - Why do you think the City of Boston made these videos in the first place? *How* can people in the city use them?
- Spending some time thinking about your own communities—please come to class having brainstormed as many communities that you belong to as you can think of. Note that for the purposes of this class, we're going to start by defining a "community" as "a group who follow a social structure within a society (culture, norms, values, status). They may work together to organise social life within a particular place, or they may be bound by a sense of belonging sustained across time and space."
- Checking your Canvas and accepting the invitation to this course "HonorsStudioSp24."

Class activities:
- Introduction to course, course goals, course outputs
- Community maps: Who are your communities? / share out
- Tech in the world: In groups of three, go out and find tech that makes a difference in all of your lives (1) on campus and (2) in Boston
- Community map expansion: Pick one community; identify three technologies that have had a huge impact on your community / share out
- Debrief

Week 2, 02.15: Tech Governance
What is power, and why does it matter?
DUE: Tech + Community Memo - Individual Assignment
LOCATION: Boston City Hall - Meet by the Information Desk and Security on 3rd Floor

Prepare for this class by...
- Completing Tech + Community Memo (individual)
- Examine City of Boston Interim Guidelines for Using Generative AI
- Reading:
  - O'Neil, The CUTGroup Book (Preface only)
  - Domhoff, The Basics of Studying Power
  - Farrow, Elon Musk's Shadow Rule

Class activities:
- Take a tour of City Hall after hours
- Meet Santi Garces, Chief Information Officer, City of Boston + aleja jimenez jaramillo, Director of Governance + Policy, Department of Innovation and Technology, City of Boston + a (newly minted) Michael Evans, Director of Emerging Technology, Department of Innovation and Technology, City of Boston; discuss Interim Guidelines - why they exist, what they want to learn
- Debrief

Part 2: AI + Society Deep Dives

Wherein we situate ourselves in our present realities + imagine possible futures.

Week 3, 02.22: Emergent Technology: AI
What is AI? What does AI look like in the world right now? What do we know? What don't we know?
DUE: Tech Governance Memo - Individual Assignment
LOCATION: NU - Ryder 394

Prepare for this class by...
- Completing Tech Governance Memo (individual)
- Listening to Scholars Strategy Network, The Rise and Risks of AI
- Reading:
  - Our World in Data, The brief history of artificial intelligence: The world has changed fast – what might be next?
  - TheDataScientist, The Different Types of AI Explained

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*Use AI for Social Good, [Exploring the Intricate World of Artificial Intelligence - Unraveling Concepts and Terminology](#) as a glossary for terms

Class activities:
- [Dr. Zhi Tan](#), Assistant Professor of Computer Science, NU; discuss types of AI: What do we know? What don't we know? What does it matter for us and for our communities?
- Debrief

Week 4, 02.29: AI in Everyday Life
How does (can) AI affect society?
DUE: AI + Everyday Life Memo - Individual Assignment
LOCATION: [Nubian Markets](#) - Meet in the Gathering Room

Prepare for this class by…
- Keeping a diary of how various types of AI show up in your life over the course of the week
- Complete AI + Everyday Life Memo (individual)

Class activities:
- Share out diary project
- Create teams: Identify aspects of everyday life that we care about; form teams based on common interest
- Brainstorm: How does AI interact with this aspect of everyday life?
- Create: Interview guides to ask communities about their experience of AI
- Debrief

Week 5, 03.07: SPRING BREAK!
Enjoy the week!

Week 6, 03.14: Pros, Cons, + Beyond
What do we know about the potential—and the potential harms—of AI in society?
DUE: AI + Society Issue: Background Memo - Group Assignment
TIME: 6:00-7:30pm
LOCATION: [Boston Public Library - Central Branch](#) - We'll be in Mezzanine Conference Room 2. The easiest way to access this room is by using the 700 Boylston Street entrance. If you can't find us, ask someone at the New and Novel Desk on the first floor, and they can help direct you (please be patient if they are helping other patrons).

Prepare for this class by…
- Complete AI + Society Issue: Background Memo (group)
- Interviewing one person each from your communit(ies) about how they understand and think about AI in their daily lives

Class activities:
- Share out interview project
- Marvin Venay, Chief Advocacy Officer, Tech Goes Home + Lois Contreras Gutierrez, Senior Partnership Manager, Tech Goes Home; discuss potential benefits and potential harms of AI in society
- Debrief

Week 7, 03.21: So What?

Knowing what we know, what do we think governance should look like?
DUE: AI + Society Issue: Potential, Concerns, + Critiques Memo - Group Assignment
LOCATION: Sasaki Foundation - Meet at the front door; we'll gather as a group, sign in, and then head to our work space. NOTE: Some of the Sasaki high school interns will audit this class.

Prepare for this class by...
- Completing AI + Society Issue: Potential, Concerns, + Critiques Memo (group)
- Reading three of the following:
    - AI Decolonial Manyfesto
    - Anthropic, Collective Constitutional AI: Aligning a Language Model with Public Input
    - Future of Life Institute, Pause Giant AI Experiments: An Open Letter
    - Urban AI, Call to Urbanize Technology
    - Cornell Tech, Rebooting NYC
    For each of the above that your read, some questions to consider:
    - Who are the writers? What communit(ies) do they represent?
    - Who are they writing to?
    - What are they asking for / trying to accomplish?
    - What are common elements in the pieces you read? Uncommon elements?
    - Do you agree with the writers?

Class activities:
- Brainstorm: For your team + project, what are some values that seem important to your community?
- Generate: For your team + project, what are some principles based on these values that you believe people in power should bear in mind as they create AI policies?
- Create: Can we create our own "manyfesto" or "call" or "letter"?

Week 8, 03.28: Telling Our Story

How will we tell our story?
DUE: AI + Society Issue: Recommendations Memo - Group Assignment
LOCATION: Museum of Science

Prepare for this class by…
- Completing AI + Society Issue: Recommendations Memo (group)
- Working on your What the Tech video

Class activities:
- Meet Jacob Wessel, Public Realm Director, Streets Cabinet, City of Boston + Kris Carter, Chief Possibility Officer, MassDOT (+ former Co-Chair, Mayor's Office of New Urban Mechanics, City of Boston); also meet Meg Rosenberg, Manager of Operations, Centers for Public Science Learning; discuss how to tell the story of what we've learned, why it matters for our communit(ies), and how to create a cohesive story to share with a broader public
- Debrief

Part 3: Showtime
Wherein we deliver our deliverables and show what we know.

Week 9, 04.04: Using Our Collective Knowledge to Inform Policy
Now that we know what we know… now what?
DUE: Presentation + Final Memo
LOCATION: Civic Pavilion

Prepare for this class by…
- Finalizing your What the Tech video
- Finalizing your memo for distribution
- Getting ready to present your video + memo!

Class activities:
- Video presentation + memo sharing! We've invited all of our past guests to join us in checking out your final videos. We'll also have your memos available for distribution.